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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,067	06/16/2000	Toshinari Suzuki	0213-1430-2	5416

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EXAMINER

HARTMAN JR, RONALD D

ART UNIT PAPER NUMBER

2121

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/596,067

Applicant(s)

SUZUKI ET AL.

Examiner

Ronald D Hartman Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 3-10 are presented for examination.

Drawings

The drawings are objected to because in Figure 1, in between elements 101 and 102, there appears a line of text that is not English and therefore is unreadable to one of ordinary skill in the art. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tascillo et al., U.S. Patent No. 5,761,626.

As per claims 3 and 5, Tascillo teaches a feedback control system for a motor vehicle that employs the benefits of a neural network for adjusting parameters of the vehicle in order to control the vehicle, either through the use of a robot or a power control module (PCM). The use of a first and second weights corresponding to

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separate models is inherent to the design of a typical neural network but can be best seen graphically with respect to Tascillo as depicted by Figure 14. Furthermore, Tascillo also teaches the use of error feedback for tuning and optimizing control over the vehicle by comparing scheduled speed results to actual speed results (C4 L5-10 and C5 L6-35).

As per claims 4 and 6, Tascillo teaches the weight adjustments being in the range of 0 to 1 (C9 L40-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tascillo as applied to claim 3 above.

As per claims 7-10, Tascillo does not specifically teach a slip rotation speed or a target rotation speed; they are both obvious variations of the disclosed system. That is, since Tascillo clearly teaches the use of clutch patterns and the use of diagnostic adaptive control for controlling a robot or PCM to reduce slip and other errors due to motor vehicle variations (C5 L8-19), and since the use of a PCM for monitoring and controlling the transmission of a vehicle is well known, and since transmission slip is a well known vehicle variation that decreases the efficiency of a vehicle from a closed

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loop control system standpoint, the use of Tascillo's system for monitoring and controlling this abnormality would have been an obvious variation of the vehicle control system of Tascillo since it would form a more efficient means of adaptively controlling the vehicle by providing information with respect to the controller (robot or PCM) pertaining to speed, which then could be used by the PCM or robot to form a more efficient means of shifting, thereby decreasing vehicle lag, which is a problem that is addressed by the teachings of Tascillo. Therefore, for at least this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have allowed Tascillo's disclosed system to incorporate the calculation of a slip rotation speed and its comparison to a target rotation speed for efficient and effective adaptive control of a vehicle control system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (703) 308-7001. The examiner can normally be reached Monday-Friday, 11:30 am – 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee, can be reached at (703) 305-8498. The fax number for this examiner is (703) 746-5408.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9618.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

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Or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor
(Receptionist).

Ronald D. Hartman Jr.
Patent Examiner
Art Unit 2121
December 10, 2002



JOHN A. FOLLANSBEE
PRIMARY EXAMINER